FIG. 1

```
                    ┌─────────┐
                    │  Start  │
                    └─────────┘
                         │
```

200 capture 160 samples of x and u for frame n

210 $R_{x,k}\ (k=0...511) = \sum\limits_{1x0}^{139} x(-k-i) \bullet u(-i)$

220 $peak = \max(\,|R_{x,k}\ (0...255)|\,)$

225 $baseline = \sqrt{\dfrac{\sum\limits_{k=384}^{511} R_{x,k}^2\ (k)}{128}}$

230 $e(0...-159) =$ echo cancler output using old filter coefficients

235 Calculate trial updated filter coefficients

240 $etrial(0...-159) =$ echo cancler output using updated filter coefficients

245 $E_{old} = \sum\limits_{i=0}^{159} e^2(-i)$

250 $E_{trial} = \sum\limits_{i=0}^{159} e\ trial^2(-i)$

255 $peak/baseline > threshold$ AND $E_{trial} < E_{old}$? — NO

↓ YES

260 $e(0...-159) = e_{trial}(0...-159)$

265 old filter coefficients (frame n+1) = trial updated filter coefficients (frame n)

FIG. 2